

We claim:

1. A lamp assembly comprising:
 - a support circuit board defining a plurality of extensions extending from a periphery of the board for attachment to a mold;
 - 5 a plurality of light emitting diodes mounted to the circuit board;
 - an electrical connection attached to the circuit board and extending outwardly of the lamp assembly;
 - a mold in place lens material encapsulating the circuit board and light emitting diodes, and formed to provide a predetermined shape for the lens
 - 10 assembly, the electrical connection extending outwardly of the lens assembly.
2. The lamp assembly of claim 1 wherein the circuit board defines an aperture.
3. The lamp assembly of claim 2 wherein the circuit board defines an aperture.
- 15 4. The lamp assembly of claim 1 wherein the circuit board has a reflector attached thereto.
5. The lamp assembly of claim 4 wherein the circuit board has a plurality of reflectors attached thereto.
6. The lamp assembly of claim 1 wherein the LEDs are positioned and
- 20 arranged in rows and columns.
7. The lamp assembly of claim 6 wherein at least one of the rows of LEDs emit light having a color different from at least another row of the LEDs.

8. The lamp assembly of Claim 7 wherein the lens material has at least one opening formed in it for permitting attachment of the lamp assembly to another structure.

9. The lamp assembly of Claim 1 wherein the lamp assembly withstands a
5 force of at least 30 ft.lbs.per square inch of force without damage.

10. A lamp assembly comprising:

a moldable, translucent material;

a light emitting unit attached to a circuit board defining a plurality of extension extending from a periphery thereof and wherein the circuit board has
10 been molded within the material; and

electrical leads attached to circuit board that extend through the material to allow electrical connection to the circuit board.

11. The lamp assembly of claim 10 wherein the circuit board has a reflector attached thereto.

12. The lamp assembly of claim 11 wherein the circuit board has a
15 plurality of reflectors attached thereto.

13. The lamp assembly of claim 10 wherein the circuit board defines an aperture.

14. The lamp assembly of claim 13 wherein the circuit board comprises a
20 plurality of apertures.

15. The lamp assembly of claim 10 wherein the light emitting unit comprises a plurality of light emitting units comprising light emitting diodes (LEDs).

16. The lamp assembly of claim 15 wherein the LEDs are positioned and arranged in rows and columns.

17. The lamp assembly of claim 16 wherein at least a portion of one of the rows of LEDs emits light having a color different from at least a portion of another row of the LEDs.

18. The lamp assembly of claim 10 wherein the lens material has at least one opening formed in it for permitting attachment of the lamp assembly to another structure.

19. The lamp assembly of claim 10 wherein the lens material can withstand a force of at least 30 ft.lbs.per square inch without damage.

20. A method of manufacturing a lamp assembly:

providing a circuit board comprising a plurality of extensions extending from a periphery of the circuit board;

attaching a light emitting unit connected to the circuit board; and

injecting a moldable, flowable lens material around substantially all of circuit board and light emitting unit; and

allow the moldable, flowable lens material to harden.

21. The method of claim 20 wherein the step of injecting the lens material is performed such that the circuit board and light emitting unit are encased within the moldable lens material in the substantial absence of air.

22. The method of claim 20 wherein the step of providing a circuit board comprises the step of providing a circuit board comprising a plurality of

extensions extending from a periphery of the circuit board and defining a plurality of apertures.